

# EXCEL-100

eldrotec

-40°C @ 90W  
-50°C to 170°C

## Low-Power Active Thermal Forcing System

*Precision Temperature Control for Semiconductor & Electronics Validation*



-50°C to +170°C



±0.1°C



-40°C @ 90W



Precision Control



Ramping Control



Advanced 7" Touch HMI

The **EXCEL-90** is specifically engineered for Active Temperature Forcing of Low-power IC's devices,. Unlike standard cooling solutions, our system maintains a rock-solid, stable temperature setpoint even when the DUT operates at peak electrical loads.

- Low Load Handling: capable of stabilizing devices with an internal power dissipation of up to 90 W.
- Active Power Compensation: Specifically optimized to counteract Low heat loads, maintaining precise stability of ±0.1°C.
- Extreme Temperature Range: Reliable performance from -50°C to +170°C.
- Superior Cooling Efficiency: Achieving -40°C @ 90W for the most demanding thermal characterization processes.

# Performance Analysis & Technical Specifications

## Operating

Temperature range	-50°C to +170°C
Temperature stability	±0.1°C
Transition rates	Up to 75°C/min
Temperature sensor types	PT100 thermistor
Programmable Force-Controlled Actuation	Up to 75 Kg Optional Custom

## Facilities

Power	208-230V AC 50/60Hz
Customer CDA [Recomended] To prevent condensation	<0.5cfm @ 90PSI -70°C dew point
Ambient Operating temperature	-10°C to 35°C

## Mechanical Data

System size WxHxL (mm)	410 x 320 x 580
System weight (Kg)	~50
DUT Dimensions (mm)	Optional Up to 70X70
Controller to Thermal Head distance	~2 meter (Optional to custom)

## Communication and Control

Ethernet Full Automation	TCP/IP RJ-45
USB	Optional
Touch screen display	Advanced 7" Touch HMI

## Programmable Force-Controlled Actuation

- **Integrated CDA-Driven Mechanism:** High-precision pneumatic actuator for consistent and repeatable pressing cycles. Dynamic
- **Coupling Optimization:** Ensures ideal electrical and thermal contact for Socketed Devices and maximizes heat transfer for Soldered Devices.
- **Safety & Precision:** Protects delicate PCBs and semiconductor packages from mechanical stress.

